



# map-tite EA, E Series - General Purpose & Vacuum Couplings

## Featuring...Snap-tite quality with superior pressure and flow characteristics over the competition.

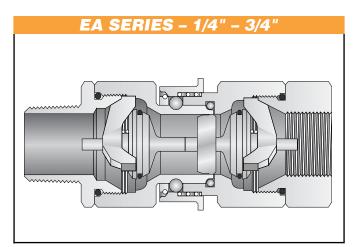


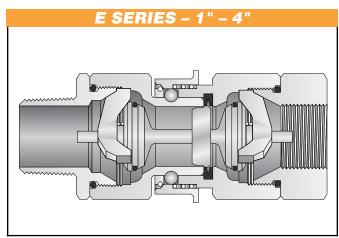
Snap-tite's **EA Series** quick disconnect coupling is designed specifically for vacuum and medium pressure service, providing a dependable means for speeding fluid line changeover in autoclave applications ranging from aircraft fabrication to plastic molding.

Snap-tite's **E Series** quick disconnect couplings have been proven by years of use on hydraulic and pneumatic applications as well as many other liquids and gases. They are designed and manufactured for years of reliable service.

- **Sizes** EA Series: 1/4", 3/8", 1/2", 3/4" E Series: 1", 1-1/4", 1-1/2", 2", 3", 4"
- **Metals** EA and E Series are available in four metals Zinc Trivalent Chromate Plated steel<sup>†</sup>, brass, aluminum and 316 stainless steel. Please consult factory. A variety of protective finishes are available. Please consult factory.
- **Seal Versatility** Wide range of standard and special seal materials available.
- **High Temperature Capability in EA Series** A unique configuration for containing the nipple o-ring seal to affect both a diametrical and compression seal allows the EA Series to handle high temperature and vacuum internally even with an external pressure on the coupling or the reverse while maintaining reliability.
- **Smooth Flow** Snap-tite's "Jet Stream" valve design helps maintain a clean linear flow. Positive positioning of the valve aids in maintaining a steady, even flow under normal working conditions.
- **Vacuum Capability** Dependable service down to 29.72"Hg.
- Dependable Operation Ball-lock mechanism provides positive connection while two piece construction allows for end fitting versatility.
- **Sleeve Lock** Sleeve lock option aids in preventing accidental disconnection of the coupling.

<sup>†</sup>Conforms with ROHS and WEEE European Union Directives



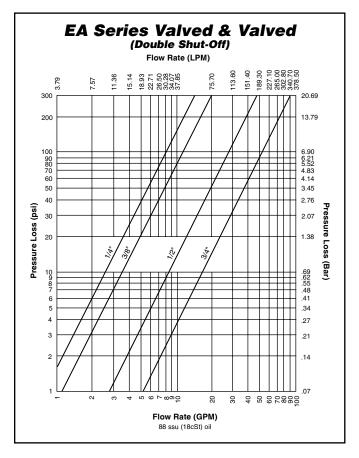


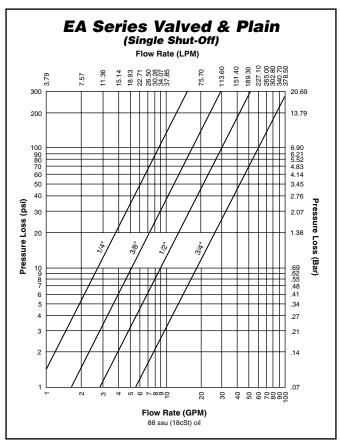
PRESSURE RATINGS* Valved & Valved, Valved & Plain and Plain & Plain Couplings																
		ST	EEL		STAINLESS STEEL				BRASS				ALUMINUM			
SIZE	Maximum Working		Mimimum Burst		Maximum Working		Minimum Burst		Maximum Working		Minimum Burst		Maximum Working		Minimum Burst	
	PSI	BAR	PSI	BAR												
1/4"	3,000	207	6,000	414	3,000	207	6,000	414	1,500	103	3,000	207	1,500	103	3,000	207
3/8"	3,000	207	6,000	414	3,000	207	6,000	414	1,500	103	3,000	207	1,500	103	3,000	207
1/2"	3,000	207	6,000	414	3,000	207	6,000	414	1,500	103	3,000	207	1,500	103	3,000	207
3/4"	2,000	138	4,000	276	2,000	138	4,000	276	1,500	103	3,000	207	1,500	103	3,000	207
1"	1,500	103	3,000	207	1,000	69	2,000	138	500	34	1,000	69	500	34	1,000	69
1-1/4"	1,000	69	2,000	138	750	52	1,500	103	300	21	600	41	300	21	600	41
1-1/2"	1,000	69	2,000	138	750	52	1,500	103	300	21	600	41	300	21	600	41
2"	750	52	1,500	103	500	34	1,000	69	300	21	600	41	300	21	600	41
2-1/2"	500	34	1,000	69	400	28	800	55	300	21	600	41	300	21	600	41
3"	500	34	1,000	69	300	21	600	41	200	14	400	28	200	14	400	28
4"	500	34	1,000	69	200	14	400	28	150	10	300	21	150	10	300	21

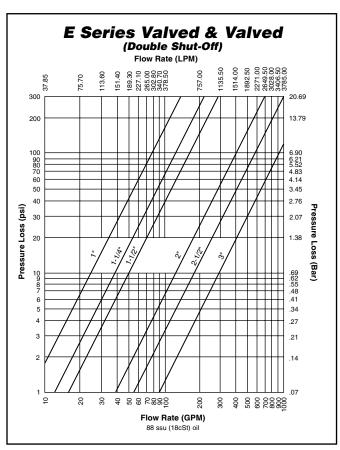
<sup>\*</sup>Note: Pressure ratings were established under static pressure conditions. Therefore, pressure ratings for any given flow, pressure surge, and/or vibration may vary from those ratings.

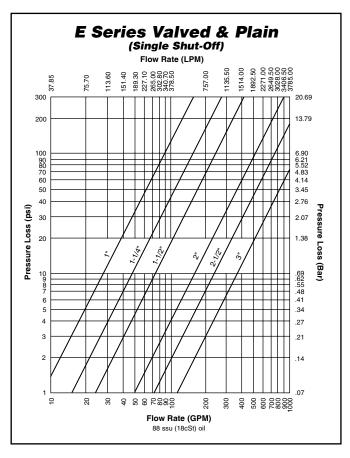
VACUUM CAPABILITY AT STANDARD BAROMETRIC CONDITIONS																
	EA SERIES							E SERIES								
	1/4	4"	3/	8"	1/	2"	3/	4"	1	II	1-1	/4"	1-1	/2"	2	) II :
	IN.HG	ATM	IN.HG	ATM	IN.HG	ATM	IN.HG	ATM	IN.HG	ATM	IN.HG	ATM	IN.HG	ATM	IN.HG	ATM
CONNECTED	29.7	.99	29.7	.99	29.7	.99	29.7	.99	29.7	.99	28.0	.94	27.0	.90	26.0	.87
COUPLER OR NIPPLE ALONE (DISCONNECTED)	29.7	.99	29.7	.99	29.7	.99	29.7	.99	20.5	.69	12.0	.40	4.2	.14	4.5	.15

### **FLOW CHARTS**







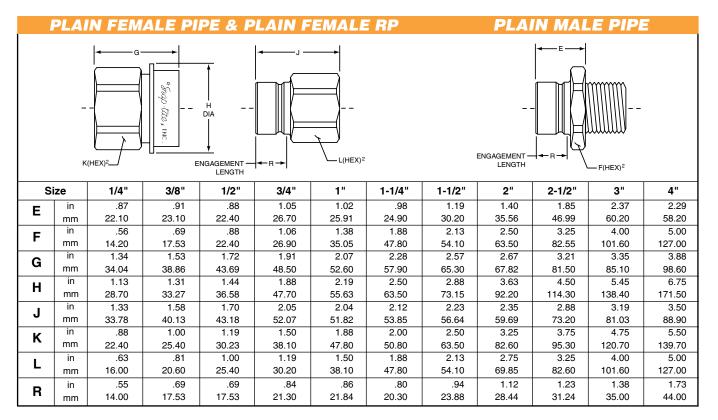


#### COUPLING COMBINATIONS & END FITTINGS

- 1. Double shut-off coupling: Valve coupler and valve nipple
- 2. Single shut-off coupling: Valve coupler and plain nipple
- 3. No shut-off or straight through: Plain coupler and plain nipple. Plain couplers cannot be used with valve nipples.

All combinations of the same coupling size are interchangeable regardless of material, finish or end fittings.

All (	COMBIN	ations of the	same	coupiir	ig size are	e intercha	ngeable	regard	Jiess of	mate	riai, iinisn (	or end fitti	ngs.			
							V	ALV	/ED							
					SEE EP	D(HEX)²-	<u></u> -}-}\-		B DIA MENT - NGTH	C	D(HEX) <sup>2</sup>	SEE END FITTINGS				
Si		1/4"	3/8		1/2"	3/4"	_	"	1-1/4		1-1/2"	2"	2-1/		3"	4"
Α	in mm	1.34 34.04	1.5 38.1		1.62 41.15	1.91 48.51	1	2.07 2.58	2.2 57.9		2.57 65.28	3.14 79.76	3. 92.	63	3.88 98.55	4.58 116.30
В	in	1.13	1.3	31	1.44	1.88	2	2.19	2.5	50	2.88	3.63	4.	50	5.45	6.75
	mm in	28.70 1.30	33.2		36.58 1.51	47.80 1.79			63.50 2.02		73.15 2.25	92.20 2.72	114. 3.	30   1 20	38.40 3.58	171.50 4.24
С	mm	33.02	37.0	)8	38.35	45.47	48.01		51.3	31	57.15	69.09	81.	28	90.90	107.70
D	in mm	.88 22.40	1.0 25.4		1.19 30.23	1.50 38.10	1.88 47.75		2.00 50.80		2.75 69.85	3.75 95.25	114.	50 30 1	5.25 33.40	6.75 171.45
R	in mm	.55 14.00	.6 17.5	69 53	.69 17.53	.84 21.30	9-	.86 1.84	.8 20.3	30	.94 23.88	1.12 28.44	1. 31.	23	1.38 35.00	1.73 44.00
		14.00	17.0		17.50	1				3S1	20.00	20.44	01.		05.00	44.00
			s	ize	1/4"	3/8"	1/2"	3/4		1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
Male Tapered	_		F	in	.75	.69	.95	.9	96	1.14	1.31	1.44	1.40	1.83	1.88	2.88
Pipe	=	Hmmm'		mm	19.05	17.53	24.13	24.	38 2	28.96	33.27	36.58	35.56	46.48	47.75	73.15
	=		G <sup>2</sup>	in	.88	1.00	1.19	1.5	50	1.88	2.00	2.50	3.50 <sup>3</sup>	4.00	4.75	6.00
		G <sup>2</sup>	٦	mm	22.35	25.40	30.23	38.	10 4	47.75	50.80	63.50	88.90 <sup>3</sup>	101.60	120.65	152.40
EM Male		← F →	F	in	.74	.74	.84	1.1	13	1.16	1.27	1.46	1.71			
and MS33656	Amms!	•	mm	18.80	18.80	21.34	28.	70 2	29.46	32.26	37.08	43.43				
	=		G <sup>2</sup>	in	.88	1.00	1.19	1.5	50	1.88	2.00	2.50	3.50 <sup>3</sup>			
		G <sup>2</sup>		mm	22.35	33.27	30.23	38.	10 4	47.75	50.80	63.50	88.90 <sup>3</sup>			
MS33657	7	F	F	in	1.23	1.31	1.47	1.8	84	1.84	1.95					
	$\Rightarrow$			mm	31.31	33.27	37.34	46.	74	46.74	49.53					
			$\mathbf{G}^2$	in	.88	1.00	1.19	1.5	50	1.88	2.00					
	_IJ		G	mm	22.35	25.40	30.23	38.	10 4	47.75	50.80					
Female Tapered		<u>→ </u> - -   <b>F</b>	in	.31	.40	.47		50	.60	1.26	.70	.78	.90	.88	1.13	
Pipe				mm	7.87	10.16	11.94	12.	70	15.24	32.00	17.78	19.81	22.86	22.35	28.70
			G <sup>2</sup>	in	.88	1.00	1.19	1.5	50	1.88	2.00	2.50	3.50	4.00	4.75	6.00
			G <sup>−</sup>	mm	22.35	25.40	30.23	38.	10 4	47.75	50.80	63.50	88.90	101.60	120.65	152.40
EF Female	_	→ F -	F	in	.46	.70	.57	1.0	00	.87	1.11	.85	1.01			
Straight and	=			mm	11.68	17.78	14.48	25.4	40 2	22.10	28.19	21.59	25.65			
MS3364	9 _		G <sup>2</sup>	in	.88	1.00	1.19	1.5	50	1.88	2.00	2.50	3.50			
	_	$G^2$	G-	mm	22.35	25.40	30.23	38.	10 4	47.75	50.80	63.50	88.90			
EB Male	•  -	F	F	in	1.39	1.56	1.67	2.0	03	1.84	2.14					
SAE Bulk- Head	$\Rightarrow$		-	mm	35.30	39.62	42.42	51.	56 4	46.74	54.36					
rieau			<u>~</u> 2	in	.88	1.00	1.19	1.5	50	1.88	2.00					
	_Ľ	√G²	G <sup>2</sup>	mm	22.35	25.40	30.23	38.	10 4	47.75	50.80					
Female	_	→ F -		in	.39	.40	.53		56	.60	1.26	.70	.78	.90	.89	1.13
RP <sup>4</sup> British Parallel	=		F	mm	9.91	10.16	13.46	14.2	22	15.24	32.00	17.78	19.81	22.86	22.35	28.70
raiaiiei	_		G <sup>2</sup>	in	.88	1.00	1.19	1.5	50	1.88	2.00	2.50	3.50	4.00	4.75	6.00
	_	G <sup>2</sup>	G <sup>2</sup>	mm	22.35	25.40	30.23	38.	10 4	47.75	50.80	63.50	88.90	101.60	120.65	152.40



<sup>&</sup>lt;sup>1</sup> Other special end fittings available upon request.

			CONNECT & Valved	SPILLAGE ON DISCONNECT Valved & Valved			
Series	Size	Internal Pressure psig (bar)	Force to Connect lbs. (kg)	With 10 psi Internal Pressure (cc or ml)	With 50 psi Internal Pressure (cc or ml)		
EA	1/4"	200 (15)	50 (22.7)	1.2	1.5		
EA	3/8"	200 (15)	60 (27.2)	1.4	2.5		
EA	1/2"	200 (15)	95 (43.1)	4.2	4.6		
EA	3/4"	100 (10)	95 (43.1)	10.5	11.6		
Е	1"	100 (10)	145 (65.8)	19.6	21.4		
Е	1-1/4"	100 (10)	190 (86.2)	30.8	38.6		
Е	1-1/2"	50 (5)	150 (68.0)	55.2	59.3		
E	2"	50 (5)	245 (111.2)	85.3	96.5		
Е	2-1/2"	50 (5)	425 (192.8)	172.0	251.0		
Е	3"	50 (5)	560 (254.0)	262.0	286.0		
Е	4"	2 (0)	45 (20.4)				

<sup>&</sup>lt;sup>2</sup> Dimensions taken across the hex flats. Round stock with two milled flats may be substituted for hex stock. Dimensions across flats same as dimensions across hex flats. Max O.D. of round stock will not exceed the dimensions across the points of the hex stock. Valve coupler and nipple bodies may be supplied from round bar stock without wrench flats.

 $<sup>^3</sup>$  3.5" (88.9 mm) across hex flats - may substitute 3.75" (95.25 mm) round with 3.38" (85.85 mm) across wrench flats.

<sup>&</sup>lt;sup>4</sup> Notch on Hex indicates RP British parallel threads.

#### **ACCESSORIES**

Dust caps, dust plugs and pressure caps protect disconnected coupler and nipple from damage, dirt and other contaminants. Dust caps and dust plugs are available in plastic and clear anodized aluminum.



#### **Plastic Caps and Plugs**

Inexpensive means to protect your investment against contamination and damage. Comes with a loop to fit over pipe fitting or affixing to equipment with sheet metal screw. Available in sizes 1/4" thru 1".



AMPF

#### **Aluminum Dust Caps and Plugs**

Alternate method to protect your equipment – aluminum dust caps and plugs are available in sizes 1/4" thru 3". The 1/4" thru 3/4" sizes come with 10" chrome plated brass bead chain. The 1" and above come with steel zinc plated sash chain.



#### **Pressure Caps**

Pressure-tight pressure caps for nipples are standard in steel, zinc yellow dichromate plated. Other materials such as brass, aluminum and stainless steel available on special order. Sizes available 1/4" thru 3". Sizes 1/4" thru 3/4" come with 10" length of corrosion resistant steel cable. Sizes 1" thru 3" come with 12" of cable-all with adjustable loop at end of cable. Consult factory for special lengths and part number.

SIZES	PLASTIC PLUG	PLASTIC CAP	ALUMINUM PLUG	ALUMINUM CAP	PRESSURE CAP
1/4"	PDP-4	PDC-4	AMPE-4	ADCE-4	MCE-4
3/8"	PDP-6	PDC-6	AMPE-6	ADCE-6	MCE-6
1/2"	PDP-8	PDC-8	AMPE-8	ADCE-8	MCE-8
3/4"	PDP-12	PDC-12	AMPE-12	ADCE-12	MCE-12
1"	PDP-16	PDC-16	AMPE-16	ADCE-16	MCE-16
1-1/4"			AMPE-20	ADCE-20	MCE-20
1-1/2"			AMPE-24	ADCE-24	MCE-24
2"			AMPE-32	ADCE-32	MCE-32
2-1/2"			AMPE-40	ADCE-40	MCE-40
3"			AMPE-48	ADCE-48	MCE-48

#### SPARE PARTS

Snap-tite Quick Disconnect Couplings are designed for long, trouble-free life. Upon occasion, certain parts may get damaged and need to be ordered.

**Valve Kits** (Includes valve, valve spring and stop. Valve seal is included in sizes 3/8" thru 1" in steel, brass and aluminum only).

Part Number – Use the base part number followed by SPK **Example:** VEAC4-SPK

**BVEC16-SPK** 

**Valve Seals** (1/4" valve seal is staked in the coupler and nipple bodies in all materials and is not considered field repairable. 3/8" and above are available for repair).

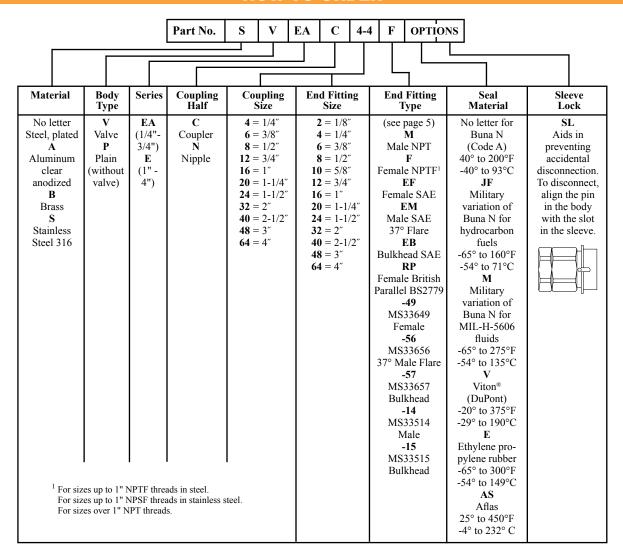
Part Number – (EA or E) (size)-55" **Example:** EA8-55

E16-55V

**Nipple Seals** (O-ring for EA Series, butt seal for E Series). Part Number – (EA or E) (size)-58" **Example:** EA6-58 E16-58

For other available spare parts, consult factory.

#### **HOW TO ORDER**



#### ! WARNING!

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Snap-tite, Inc., its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operation conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Snap-tite, Inc. and its subsidiaries at any time without notice.



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